The Tech

OFFICIAL NEWSPAPER OF THE UNDERGRADUATES OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

VOL. LXXVIII NO. 2 CAMBRIDGE, MASSACHUSETTS, FRIDAY, FEBRUARY 14, 1958 5 CENTS

Stratton Says Dormcon Open House Decision Not Socially Acceptable

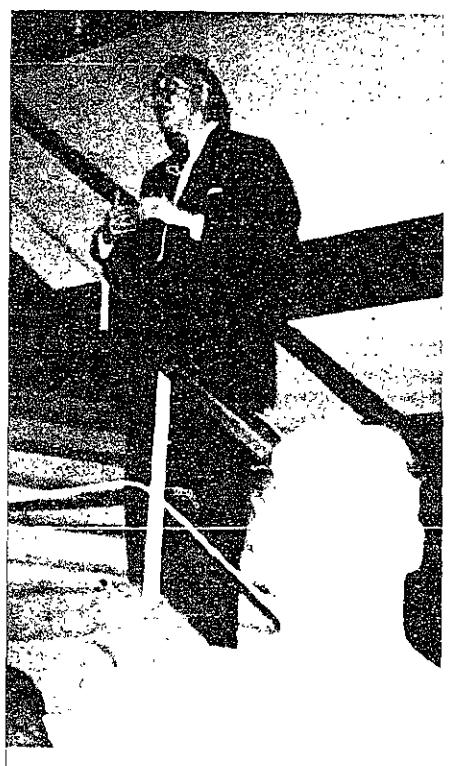
During the question-and-answer period following Dr. Stratton's speech, a question was raised on the policy concerning parietal rules. This was Dr. Stratton's answer:

"The Corporation Committee was not fully aware of the situation when they commenced investigation . . . MIT and its environs are a bleak place. There is a tremendous need to build here a campus—a pleasant community . . . Dormitory Council failed to acknowledge this problem fully . . ."

"Customs and practices must not be changed abruptly without strong reasons. But take into consideration the other people involved, such as parents . . . The practice of having a girl in a man's room, with the door locked, until one a.m., simply would not be tolerated by most homes, hotels, and clubs. The present setup of open house hours is not the accepted standard of society."

"We must try to make any rules which we adopt stick fast. The worst aspect of the Open House problem are the abuses, when the rules are not obeyed."

Dr. Stratton promised that a decision on the Dormcon Open House Report would be forthcoming soon. Dean Rule is meeting with Dormcon this coming Tuesday.



Chancellor Stratton speaks from the dining room steps in Baker House.

More Emphasis On Science Vitally Needed To Educate Man For A Confused Civilization

The new order of civilization is founded in science, and those who hope to be influential in society must have a thorough understanding of its principles, according to Dr. Julius A. Stratton, Acting President of MIT. In an informal speech before a Baker House Buttery last Tuesday night, Dr. Stratton stated this philosophy, and made the following points:

1) MIT has a vital responsibility in preparing people with strong scientific backgrounds.

2) Engineering courses must be backed up with a fuller, indispensable foundation of basic science.

3) A four year undergraduate education can no longer fully prepare people for professional careers.

4) The modern liberal education must drastically increase its scientific content.

The Baker House dining hall was filled with listeners as Dr. Stratton spoke. He began by saying that in his two months of service as president, he was struck by the necessity of conveying to the students a real sense of belonging and participation. He then went on to elaborate the basic principles and philosophies of the Institute.

"This is the most extraordinary period of human history," Dr. Stratton said, "and science is responsible for the change. MIT must now prepare its students for what lies ahead in the future. You, the students, will play a great role in shaping this future. You must remember that simply eliminating the 'Russian threat' will not solve our problems."

Speaking of the changes in science and technology, Dr. Stratton said that they have caused a strong reconsideration of the MIT departmental system to take place. The different engineering courses overflow into other departments, and share each other's techniques and problems. To alleviate this problem, and to give MIT students a sounder preparation for future work, "there is an increasing feeling among a large part of the faculty that engineering must have a stronger basis in chemistry, physics, and mathematics. But this must not go too far, or else MIT will become a 'school of applied science' like Cal Tech or Harvard Engineering. I do not believe that this is MIT's role."

"Science and engineering are two different viewpoints and methods," he continued. "Science seeks to advance the frontiers of knowledge, while engineering must be concerned with applications, economics, and personnel management. We must increase the science background of engineering, but retain these important professional disciplines."

Dr. Stratton also said that a four year undergraduate education cannot completely prepare a professional man. He described the function of MIT as providing a "liberal education specializing in science and its applications. This should prepare students for research, graduate work in science or engineering, medicine, management, et cetera."

Ritchie Coryell '58, who was in the audience, then raised the question of the old classical education. Stratton answered, "One cannot live an influential life now and be unaware of scientific facts. One cannot understand science by a mere survey course. Of course, the Humanities are essential to a liberal education; a liberal education depends on attitude rather than subject matter. But old-style liberal arts colleges will have to change very much. They must add more basic scientific subjects for all students. Even so, they will never become like MIT."

New Nuclear Engineering Dept. To Be Headed By Manson Benedict

Dr. Julius Stratton, Chancellor and Acting President of MIT, has just announced the creation of a Department of Nuclear Engineering; the new department offers courses in nuclear reaction theory, instrumentation, production of useful nuclear reactions, reactor design and construction, radiation shielding, nuclear metallurgy, nuclear chemical technology, and heat transmission. Dr. Manson Benedict, professor of nuclear engineering has been appointed head of the department.

The $2,640,000 nuclear reactor at MIT, which will be completed this spring, will serve as a laboratory for the new department, enabling students to make first-hand studies of atomic energy.

The department, first in any New England college and one of the first in the United States, is the outgrowth of several years of experience in nuclear engineering at MIT. It will be a division of the School of Engineering, of which Dr. C. Richard Soderberg is dean. The teaching program will work in harmony with a research program, which will include studies of atomic energy for medical and industrial as well as scientific purposes.

The first course in nuclear engineering was offered in 1952 and since then others have been developed under the Chemical Engineering Department, headed by Dr. Walter G. Whitman.

The new MIT reactor is not designed for generation of power, being a "cool" one intended for research, instruction, and medical therapy. However, students receiving degrees in the new department will be prepared for professional work in designing and operating power reactors.

Radiation shielding study will be necessary if planes are to be propelled by atomic energy, since aircraft cannot be burdened with massive lead or concrete shields.

Nuclear chemical technology courses will cover processes used to refine uranium, separate isotopes, and reclaim nuclear fuels from the radioactive materials produced in reactors.

In addition to classes in Cambridge, nuclear engineering students may attend the Engineering Practice School conducted by MIT at Oak Ridge, Tenn. Study in the new department will require prerequisites of physics, mathematics and engineering, Dean Soderberg said. Classes will be open to undergraduates but the department will give degrees only for graduate work. Establishment of the department will be effective July 1.

This year 94 students have been registered for graduate study in nuclear engineering. Of these, 23 are from MIT, the others have come from 49 institutions, including Annapolis and West Point. They also include 17 foreign students.

Most of the students have been trained in physics, chemical engineering or mechanical engineering, but a number of other professions are also represented—these range from naval architecture, in which students will study construction of atom-powered ships, to sanitary engineering, in which they will analyze means of disposing of atomic wastes.

(Continued on page 5)

Boathouse Is Object Of Planning Efforts; May Be Relocated

The present MIT crew boathouse has recently been described by Assistant Treasurer Philip A. Stoddard as "in bad shape". A new reinforced concrete floor is now being laid, which should extend the life of the structure at least three and possibly five years, Mr. Stoddard said. Possibilities of a new boathouse are now being explored by Mr. Stoddard, Richard L. Balch, Director of Athletics, and Carl M. Peterson, Director of the Physical Plant, with the aid of Anderson, Beckwith and Haible, architects.

Since the MDC plans to widen Memorial Drive in the near future, and perhaps displace the present boathouse in doing so, the Institute has consulted the MDC about "alternate sites" for the structure, said Mr. Stoddard.

Baker Changes Constitution; E.C. Planing Rumpus Room

Several constitutional amendments and by-law revisions were proposed at the Wednesday meeting of the Baker House Committee. These changes were so important that their discussion occupied almost the entire one-hour meeting.

The first proposed amendment is for the creation of an Elections Committee directly under BakerComm and with clearly designated powers. Al Travers, present Elections Chairman, will become head of the newly authorized committee but will not have a vote.

Similarly the Director of Internal Facilities has been placed under the Housecomm with definite limitations on his duties. The present Director, Judson James, will continue in his new capacity, but also will not have voting privileges.

In another proposed constitutional change Bakercomm's chairman could have his interpretation of the constitution overruled by a majority of the committee. This change from the two-thirds requirement limits the chairman's powers in many fields.

A fourth amendment would require one term of residence in Baker House for membership on Housecomm and would bar members of outside living groups from Housecomm membership.

A number of by-laws were also proposed and discussed. One of these would rescind the votes of the Secretary and Treasurer in Bakercomm balloting; another would give a vote to the Inscomm representative attending Baker's meetings. These proposals are an attempt to widen democratic procedures, as the Inscomm representative is elected by a popular vote while the Secretary and Treasurer are only elected within the committee.

Another proposal would require five attendances per year of Bakercomm representatives. A fourth by-law change would allow a two-thirds vote to close any committee meeting and bar spectators. Other proposed changes allow the recall of a member by a 30% electorate vote and require a Housecomm vote to approve disbursements over $15.00.

Annual Debate Tournament To Feature 'MIT Style' Debating

The thirteenth annual MIT Invitational Debate Tournament will be held in Kresge Auditorium today and tomorrow, February 14 and 15, 1958.

The tournament, the oldest of its kind held in New England, will be attended by representatives from thirty colleges and universities, ranging from local Boston schools to as far away as Oklahoma. Included are Fordham, winner of last year's tourney; Harvard, Dartmouth, Holy Cross, Brooklyn, Boston University, and Navy.

The teams will meet in five preliminary rounds and then the schools with the best records in this competition will meet in the final round to determine the champion. All debates will be on the national collegiate debate topic—Resolved: "That the requirement of membership in a labor organization as a condition of employment should be illegal." The final round will be held in Kresge Auditorium, Saturday at 2:30, and is open to the public.

A unique feature of the tournament will be the "MIT style of debate" employed, in which the first rebuttal speakers are given the option of cross-examining their opponents if they so choose. MIT this year has entered tournaments at Vermont, where they amassed a score of 7-3. They have also debated at Tufts (10-0), NYU (5-5) and last weekend at the Harvard Invitational Tournament where they just missed taking the honors with a 5-1 record. The University of Pennsylvania (6-0) won the contest.

Petitions For UAP, UAVP Candidates In Today, Voting Feb. 25

Petitions of candidates for Undergraduate Association President and Vice President and all class offices must be turned in today by 4:00 p.m.

As we go to press, the following people have announced their candidacy for office.

For UAP, Patrick McGovern '59, Jerry Stephenson '59, and Alberto Velaochaga '59.

For UAVP, George Haymaker 59, Adul Pinsuvana '59, and Carl Swanson '60.

Running for offices of the Class of '59 are Buddy Long for president and Paul Brown, representative to the Commuter Council. For the Class of '60, T. H. Courtney and R. Lienhard are running for president. Tom Miller, Ken Singer and Dorsey Dunn are runing for President of the Class of '61, and Henry Gabelnick is running for Commuter Council representative.

For permanent officers of the Class of '58, H. G. Johnson is running for Secretary Treasurer, and Bob Jordan for President.

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VOL. LXXVIII February 14, 1958 No. 2

Entered as second class matter at the post office at Boston, Massachusetts. Published every Tuesday and Friday during the college year, except during college vacations, by THE TECH, Walker Memorial, Cambridge 39, Mass. Telephones TRowbridge 6-5855-6 or UNiversity 4-6900, Ext. 2731.

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The Board of Directors of The Tech *takes pleasure in announcing the appointment of Alfred Kniazzeh '59 of Phi Gamma Delta and Chesterton, Indiana; John B. Stevenson '60 of Phi Gamma Delta and Cedar Rapids, Iowa; Kenneth F. Reinschmidt '60 of Bemis and Cincinnati, Ohio; Don J. Wilen '60 of Burton House and Albany, New York; Peter M. Silverberg '60 of Runkle and Buffalo, New York; Jon P. Wigert '60 of Runkle and Des Plaines, Illinois; Walter F. J. Crewson '60 of Atkinson and Delmar, New York; Gus A. Petitt III '60 of Ware and Birmingham, Alabama; Abraham Feinberg '60 of Baker House and Great Neck, New York; and Justin L. Kreuzer '60 of Bemis and Elkins Park, Pennsylvania to the Associate Board.*

Science In Educatoni

Wednesday night at the Baker House Buttery Dr. Stratton foresaw the emergence of a new kind of "classical" education. The Nineteenth Century's thorough grounding in Latin and Greek will have its counterpart in the new scientific age the world is entering. Preparatory school training, instead of revolving around the older disciplines of languages and classics, will supplant these with mathematics and physics.

Studying ancient languages in the former era served a double purpose. First, it taught logic and the ability to see implications. The structures of Latin and Greek forced the learner to organize and to relate concepts which derive from primary rules. Second, the classical literature awakened the reader to problems of man and society. One purpose taught method, the other, character.

Dr. Stratton called for "a liberal education centered in science and its applications (as preparation for) an age of science". He held that MIT should not concentrate solely on the undergraduate who is headed for research, but should prepare men for lives in areas like medicine and management. This has been heard before. But to those present Wednesday night it carried a fresh urgency.

As education at all levels comes increasingly to focus on science and mathematics, it is essential to remember the two objectives toward which classical training drove—the teaching of method and the building of character. Science and mathematics teach method—perhaps even better than Latin and Greek. While classical languages give little preparation for solving certain kinds of problems, math and science provide the logical tools for a spectrum of applications. But will the new emphasis build character? Will knowing the solution to Laplace's equation improve international relations? Create a moral world? The answer is indeed difficult, but first the question must be re-phrased: *How* can a new educational program build character? It is too late to say that it need not.

—SWW

college world

All kinds of news from all over—A note on the athletic scene at Illinois Institute of Technology from the *Technology News*: "The Delts literally lost their shirts to the Delta Zeta's in the football game last Sunday. But those black and white sweatshirts really look nice on the girls. The girls also received a trophy cup from the Delts appropriately inscribed 'Phi Kappa Sigma'." Now thats the kind of athletics I'd like to see more of. Losing could be so much fun!!!

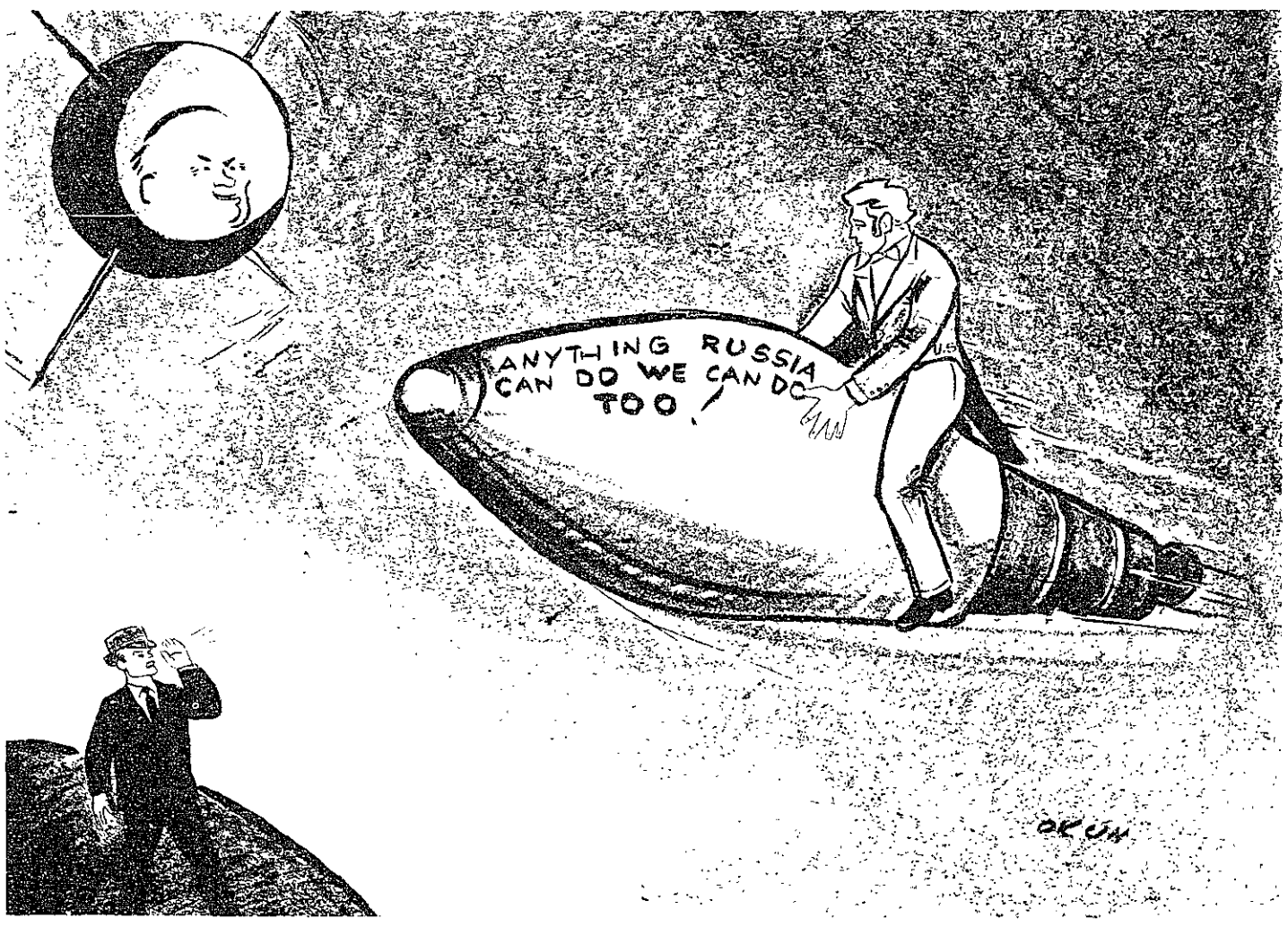
I've heard of all kinds of rivalries, but the one currently in progress between the Universities of Manitoba and Saskatchewan just about takes the cake. A really bloody rivalry too. Matter of fact, that's just what it is: a blood donation rivalry, complete with Corpuscle Queen, kidnappings, and a trophy. It all started with the abduction of Manitoba's Sno Queen, and will presumably end with a great blast of a dance at which the Queen is to be chosen. The prize to be awarded to the school with the highest percentage of donors, appropriately enough, is a gold plated TOILET SEAT (?), accompanied by 5 pints of the losing president's own pure blood. That contest, worthy as it no doubt is, does not impress me as quite as nice as the one at Illinois Tech.

Looking through the CCNY *The Ticker* I find a short item reporting that the editor of the Texas A & M daily paper was recently ". . . tarred and feathered because he advocated an end to compulsory military training and called for co-education."

Hey hey!! Big party weekend down at Wesleyan. *The Wesleyan Argus* reports all kinds of parties: "An old fashioned hayride (route not announced or important) . . . Cowboy Party—gambling is encouraged; all tables guaranteed to be honest—bring money . . . Pajama Party, with dancing to the music of Bob Halpin's 'Bedroom Band' (Costume required)" . . . and so forth. These parties were all part of a big Houseparties weekend, and all were open parties. Heck, its been so long since we've seen any all campus parties I've almost forgotten what one is.

Back to the Illinois Tech paper, a closing note: "I wonder if the ex-boy scouts of APO are winning any merit badges with their new beer mugs?" For shame!!!

—Dix Browder '59



"Why don't you build one called 'Initiative'"?

Rocket Expert Sees Space Travel Soon; Human Factor Is Main Existing Unknown

Willy Ley, rocket expert and science writer, said last Tuesday night that we will soon be building bigger rockets to shoot moon ships and solar satellites, and that man's great next step is to go himself into outer space. He spoke on "The Next Five Years in Space Travel" in Kresge Auditorium. The LSC-sponsored talk was attended by six hundred listeners.

Mr. Ley, who had predicted the current developments in missile technology over fifteen years ago, is presently on a speaking tour. Last week he was in New York City; last Wednesday he spoke in Pittsburgh, and next week he will be in Lehigh University. These lectures were all arranged four months to a year ago; Mr. Ley says, "It is great luck that my topic has turned out to be so pertinent today."

Willy Ley flew in to Boston from his New York home at 5 p.m. Tuesday, and went to dinner with the LSC staff. Immediately after completing his talk, he flew back to New York City to prepare for his next lecture. When he is doing nothing else, he writes best-selling books on popular science and space travel, contributes to magazines, attends professional meetings, and works closely with the government on its IGY satellite program.

The Thousand-to-One Ratio

Mr. Ley felt that rehashing past accomplishments was unnecessary, and dwelt on things to come. He made special mention of the "1000:1" ratio—that is, it takes a thousand pounds of rocket to lift one pound of useful payload into an orbit. Present fuels are more than sufficient for achieving an escape velocity, so the next job is simply building bigger and bigger rocket systems.

While discussing fuels, he said that present liquid fuels are almost at the limit of efficiency. He revealed that the Russian Sputniks were powered by ordinary kerosene, and that the American Explorer used a mixture of hydrazine and alcohol. He also mentioned that the "ion drive" has been under development for over two years expressly for interplanetary travel.

The next step, Mr. Ley feels, is a moon rocket. He feels that one can be launched this year, and that probably two will be—one American, the other Russian. If such a rocket missed the moon, it would become a "planetite" around the sun. It would crash back on the same launching pad from which it was shot exactly twelve years and one day after its firing. Such a "planetite" could be used as a so-called "Planetary Drone", which would be equipped with television equipment, shot to Venus or Mars, and would telemeter what it sees back to Earth. A planetite could also be used to test the as-

(Continued on page 8)

Willy Ley makes a point in his LSC sponsored talk Tuesday.

Nathan Weinman To Attend Worlds Fair As Guide, Interpreter

Nathan Weinman '59 has been selected by Dean Rule as MIT's nominee for one of the six representatives of the Commonwealth of Massachusetts in the forthcoming Brussels World's Fair. The United States State Department had instructed each state to supply six young men and women to act as guides and good-will ambassadors at the fair. Governor Foster Furcolo, in turn, asked each college in Massachusetts to select a candidate for the post.

Weinman qualified for the situation in three ways. First, he is a native of Brookline, Massachusetts. Second, he has a conversational knowledge of French, as both his parents have studied in schools in Belgium and Paris, including the Sorbonne. Third, he was selected by Dean Rule as an example of a personable young man, well suited to represent this country at the Fair.

If Weinman is chosen, he will be flown to Brussels and back at the expense of the U. S. Government. All his expenses in Brussels will also be paid by the government. His duties will include greeting the visitors and guiding them through the pavilion, for which he will also receive a wage.

Burton Chess Club's Tournament To Be Played On Saturday

The Burton House Chess Club is playing its semi-final rounds this Saturday afternoon in the 420 Lounge of Burton House. The top-scoring players will be matched against the tournament champions from Baker House, the Brothers Carl and Larry Wagner. New England chess champion Orest Popovych, Dean Frederick G. Fassett, and Faculty Resident E. N. Hartley have been invited.

The chess club is planning for a contest with the club in the University of Massachusetts at Amherst. Other projects include a possible match between Fassett and Hartley, a simultaneous challenge exhibition by Orest Popovych, who is unbeaten in such exhibitions, and the extension of the club's tournament to the entire Institute by opening the Burton House list to challengers.

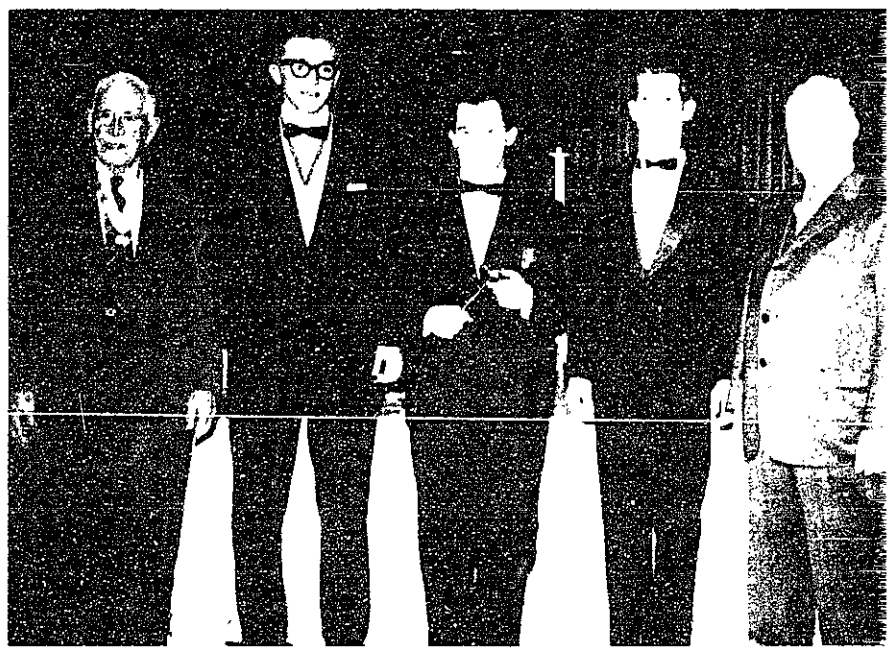
The tournament, which has been in progress since last December, uses the Swiss System to plan matches. Mr. Popovych, in addition to playing matches with the tournament, has been giving technical advice to the club concerning the management of the tournament.

De Molay Installs New Office

The Tech Chapter of DeMolay held its spring term installation of officers last Wednesday, February 12, in the library lounge. David Max Hall '60 replaced Martin Victor '58 as Master Councillor, John Irwin Frederick '60 was installed as Senior Councillor, and the post of Junior Councillor was filled by Charles Lee Brezeale '60. The installing team was the Suite of the Westerly Jurisdiction of the State of Massachusetts.

The remainder of next term's officers are:

Scribe: Peter M. Silverberg '60
Recorder: George Gilliland '60
Treasurer: David Waldbaum '
Senior Deacon: James Chalfan
Junior Deacon: Louis Wajda '60
Steward: Raymond Wenig '61
Chaplain: Roy Blomquist '61
Orator: Terry Langendoen '61
Marshal: Hal Buchanan '61
Sentinel: William Loden '60
Standard Bearer: David Sande son '61
Preceptors: Don Engleberg, Ri Godfrey, Gordon Guttrich, C Ruttenberg, all '61.



At the DeMolay installation, from l. to r., Prof. Owens, Lee Brezeale, David Hall, John Frederick, Henry Dow.

APO To Help Scouts "Be Prepared" With Swim Course Here

Tonight, some 150 Cambridge Council Boy Scouts will invade the MIT campus with the intention of learning to swim. As one of its largest public service projects, the Alpha Chi Chapter of the Alpha Phi Omego Scouting Fraternity will conduct a course in swimming instruction at the Alumni pool beginning Feb. 14, and lasting ten weeks.

When the scouts arrive, they will have already submitted a legal release and then will be given a thorough going over by the generous medical department. From there they will be escorted to the Alumni pool and, under careful supervision, will be tested to determine their swimming ability and the areas for needed improvement.

The actual course of instruction will begin Saturday night and will continue for ten course weeks. At the end of the program there will be a gala swimming meet for the scouts to display their newly learned skills and to work off excess energy.

The able instructors, as well as all of the other invaluable assistants, are volunteers, who, in days gone by, were Boy Scouts themselves. Although the Scouts are charged a nominal fee, the bulk of the program is paid for by your generous support of A.P.O. fund-raising projects, notably UMOC.

NEW COURSE

(Continued from page 1)

Professor Benedict came to MIT in 1951 at the time a decision was made for the Institute to enter the field of nuclear engineering. He was joined in 1955 by Dr. Theos J. Thompson, who has directed the design and construction of the MIT reactor. Other members of the new department will include Dr. Irving Kaplan, Dr. Edward A. Mason, Dr. Melville Clark, Jr., and Dr. Gordon Brownell.

Born in Lake Linden, Mich., Dr. Benedict was graduated from Cornell University in 1928 and did graduate work at MIT, and received a Ph.D. in 1935. He became a research fellow at Harvard University, and entered industry as a chemist. While with the M. W. Kellogg Company he worked out what is known as the "Benedict Equation", widely used in the petroleum industry to predict the properties of hydrocarbons.

In 1942 Dr. Benedict designed the Oak Ridge gaseous diffusion plant used for U-235 concentration.

In 1946 Dr. Benedict became chairman of the War Department's Committee on Inspection and Control of Atomic Energy; since 1947 he has served on the Reactor Safeguard Committee of the A.E.C. He was an adviser to the U. S. delegation at the Atoms for Peace Conference in Geneva in 1955 and is a member of the Massachusetts Commission on Atomic Energy.

Dr. Benedict is a fellow of the American Academy of Arts and Sciences, a member of the National Academy of Sciences and a director of the American Institute of Chemical Engineers. He received the Walker Award of the American Institute of Chemical Engineers for his publications on chemical methods of separation of liquids, such as that used in extracting toluene from petroleum.

PREMIER CONCERT

Premier of Gregory Tucker's "Concertino for Chamber Orchestra" will be presented in Kresge Auditorium at 3:00 p.m. Sunday, Feb. 16. Mr. Tucker is an MIT humanities lecturer currently living in Italy.

Also featured on the program is "Facade" by Edith Sitwell and William Walton. Members of the Boston Symphony will play, conducted by Klaus Liepmann.

SEMINAR

On Friday, Feb. 14 a seminar on "Continuous Measurement of Process Parameters" will be held in room 3-270 by Mr. R. H. Hillsley. Coffee will be served in room 3-174 at 3:00 p.m.

FOR SALE—Rolleiflex w/ 2.8 Xenotar. Many acc. F. R. Elec. Flash. J. Milgram, Burton 344.

FOR SALE—D 11-T Text Book $5.25. Call Hayden 509 or leave a note East Campus 487.

FOR SALE—1951 Country Squire Ford 8 cyl. station wagon, excellently maintained. Under 46,000 miles. Roomy, seats 8 or 9. R&H. Self sealing tires. Always garaged. Owner EL 4-1865.

5.01 BIBLE BORROWED—please return to Reinschmidt, Bemis 504.

LOST—GLASSES, Sunday, January 19. Brown imitation leather case, between Kresge and Westgate. Mara Jordaan, 91 Westgate, KI 7-9482.

K&E slide rule. Log-log Duplex Decitrig. $12. Call BI 4-1399 Evenings.

LOST, stolen, strayed: one St. John's Prep. Class 1957 ring. Gold with blue facet stone. Finder please notify Ed Berger, Box 271, or Bemis 510, E. C.—Reward.

WANTED—Counselors, specialty or general, older college men or graduates. Jewish boys' summer camp, near Boston, excellent summer opportunity. CHelsea 3-5271 or write: Director, 10 Brookside Drive, Cranston, R. I.

FOR SALE—Voightlander Prominent. f 1.5 lens, 1/500 sec. shutter. Used—only $150.00. Regularly sells for $275.00. See Louis Nelson, Goodale 106, East Campus.

TYPING done at home at reasonable rates—Please call ELiot 4-3594, Mrs. Lorraine Miller, 47 Hubbard Ave., Cambridge 40, Mass.

LOST: Near Memorial Drive, brief case containing important papers, Friday evening, January 24. Reward for either brief case or information concerning its loss. Confidential reply accepted. Contact J. Hansen at ALgonquin 4-5657 daily after 6 p.m. or weekends.

LOSE SOMETHING? Get it back quick through THE TECH's classified column. As a student service, THE TECH will publish any lost and found ad for one week FREE. For Lost and Found, or any kind of advertising, just drop around to THE TECH office, 020 Walker, send a note, or call Bemis 504, East Campus.

bushleaguer

Fijis Reach IM Basketball Fin

by Len Tenner '60

Tuesday night saw the elimination of Alpha Epsilon Pi, Pi Lambda Phi, and Sigma Chi from the playoffs of the Intramural Basketball Tournament. This narrows the field to five teams. Those surviving Tuesday's activity were Phi Gamma Delta, Student House, East Campus, Graduate House, and Alpha Tau Omega.

Fijis Victorious

The Fijis thwarted a last minute ATO scoring spree and went on to win an overtime thriller 53-44. Trailing 19-18 at the half, ATO led by Walt Koetke '60, who pumped in 17 points, fought back valiantly only to be matched basket for basket by the Phi Gams. A free throw spelled the difference, however, as ATO tied the game at 44-44 thus necessitating the overtime period. Here, however, ATO lost its spark, as the Fijis pumped in 9 points, while holding the losers scoreless. High man for the victors was Chuck Ingraham '58 with 13 points.

Pi Lamb Drops Close One

In another closely fought contest Student House edged Pi Lambda 31-30. It was an uphill battle all the way for the victors as they trailed 19-10 at the half. Showing the way for Student House was Gene Shaw '60 who netted 9 points. Pacing the losers were Fred Arditti '60 who led all scorers with 10 points and sharpshooting playmakers Dick Greene '60 and Milt Weiner '60.

East Campus Coasts to Victory

East Campus encountered little trouble from Alpha Epsilon Pi as they romped to a 53-25 victory. East's star center, Davy Crockett '58 ed in 21 points as he was u pable. Controlling both back the winners moved the ball and easily penetrated the lose fense. AEPi was led by Ken '61 who had 9 points, and Dave lick '59 in a valiant atten launch an offensive.

Grad House closed out the activity by rolling over Sigm 50-37. Paced by Bill Trautma Aaron Galvin who hooped 12 the Grads set up plays and for the good shots. Capturing of the rebounds, the victors were seriously threatened. Hig for the losers were Bob Whi with 12 points, Larry Flanag and Jim McNamara '58, ea whom finished with 9 points.

Tournament Moves Into Final

Last night, Grad House East Campus and Student took on A.T.O. The winners of games will meet on Friday e for the right to meet Phi G Delta for the title. The two will play on Friday to dete who will play in the conso game; the championship and lation games will be held on Su

Tuesday's Results

Alpha Tau Omega	
Phi Gamma Delta	
Student House	
Pi Lambda Phi	
Alpha Epsilon Pi	
East Campus	
Graduate House	
Sigma Chi	

End Of Regular Ice Season Ne

Moving into the next to last round of games before the playoffs, three contests in the Intramural Hockey League were held Tuesday night.

Undefeated Beta Theta Pi crushed Lambda Chi Alpha 11-0, with Rob Cross '59 sweeping in six goals.

Phi Kappa Sigma downed once powerful Sigma Alpha Epsilon 4-2, and Sigma Nu won a thriller from Tau Epsilon Pi 1-0.

Jon Weissbuch '59, manager program, announced that the offs will begin on February with the type of tournament dent on how many matche weather will permit to be p The playoffs will be either team double elimination or four round robin.

on deck

Friday:
- Fencing at Adelphi 7:00 p.m.
- Varsity Hockey at Williams 8:00 p.m.
- Varsity Squash with Princeton 7:00 p.m.

Saturday:
- Varsity Basketball with RPI 8:15 p.m.
- Fencing at Stevens 2:00 p.m.
- Rifle at Coast Guard
- Varsity Squash with Trinity 2:0(
- Varsity Swimming with Trin 2:0(
- Indoor Track with Northeast 1:1(
- Varsity Wrestling at Coast 2:0(

ACQUAINTANCE DANCE

On the night of St. Valentine two acquaintance dances will be one at Jackson College, in the Talbot Avenue, Medford. The sponsored by Children's Ho will be held in Gardner House Longwood Ave.

Beaver Cagers Drop Three Close Games
Jordan And Pulutchko Stand Out On Trip

Swinging south after finals, the Cardinal and Gray cagers played some of their best ball of the season despite narrow losses to Howard, Johns Hopkins and Catholic University.

In an encounter where the teams were never separated by more than five points for the first three-fourths, Howard University pulled away in the closing minutes to edge the Beaver hoopsters 60-54 Wednesday evening. The home squad's sharper shooting from the floor proved to be the difference.

Mac Jordan '58 played one of his best games to date garnering 12 points to lead the visitors' scoring. The contest also witnessed the return of Bob Polutchko '59, veteran rebounder and jump shot artist, who had been out on co-op. He grabbed 13 rebounds to lead the Techmen. In addition, this was the first game of the year for Dick Bradt '60, last year's frosh star.

Excessive fouling by the Burkemen was a key factor in their 73-68 defeat by Johns Hopkins in Baltimore last Friday night. The first half saw the Beavers build up an eight-point bulge as they outshot their foes from the floor and dominate the play.

After the intermission, it was a different story as the visitors cooled off. With but a few minutes remaining in the game, the Engineers' hopes for victory were smashed when both Jordan and Polutchko fouled out.

The victors were 27 for 38 from the free-throw line while the Techmen sank 14 of 17 attempts.

Bradt and Polutchko Lead Scoring

Both Bradt and Polutchko played outstanding ball as they tied for scoring honors with 18 points apiece. Jordan hit for double figures again as he tallied 15. Eric Hasseltine '59 tossed in 12 markers to aid the Beaver cause.

Closing the trip against Catholic University on Saturday night, the Engineers reversed the pattern of their previous encounter. The opening half proved disastrous for the Burkemen as the home aggregation piled up a twenty point bulge, largely through the efforts of two crack set shots.

Polutchko and Jordan led the Cardinal and Gray uprising in the final half with rebounding help from Dave Rachofsy '58 and stellar defensive work by Jack Polgarian '58. The Engineers closed the gap to three with little more than a minute left but because of their desperate tries to get the ball, their foes sank four free throws to win 77-70.

The Techmen play RPI tomorrow night at Rockwell Cage, with play by play on WTBS.

MIT 70

	FG	F	Total
Jordan	9	0	18
Polutchko	8	3	19
Bradt	0	0	0
Hasseltine	1	2	4
Polgarian	3	0	6
Howard	1	1	3
Burton	1	1	3
Cooper	2	3	7
Rachofsky	3	0	6
Morrow	0	0	0
Repetto	0	0	0
Nevins	2	0	4
Tisch	0	0	0

Trackmen Active

Tech In BAA And Millrose Games

Although hampered by lack of practice on the boards, MIT's varsity track forces truned in three very creditable performances in two meets during the between-terms spot in relay races in the Boston AA Games on February 1 and a fifth in the two-mile relay at the Millrose Games in Madison Square Garden, New York. In the latter event, although they finished behind four other squads, they were only 14 yards and 1.5 seconds behind the victorious New York University Violets.

Competing right after examinations, two varsity teams entered the Boston Athletic Association Games. The Tech thin-clads provided a thrilling finish as they edged Bowdoin by a single yard in 3:33.3 in the mile relay. The four-man team was composed of Roxy Ernsberger '58, Howie McDowell '60, Bob Williamson '59, and Ed Bell '58. Bell used good judgment in keeping the lead gained by Ernsberger in the first leg.

Apparently exams had taken their toll, however, as the two-mile relay team finished fifth behind Holy Cross, who won in the quick time of 8:04.3, Brown, Boston College, and University of Massachusetts.

The mile relay time turned its fastest time at the Millrose Games in New York as it took fifth spot in 3:29.0. NYU, the winners, finished in 3:27.5, only a second and a half swifter than Tech. The University of Rhode Island, Providence College, and Brown finished in between those two times.

The Cardinal and Grey's performance was all the more amazing as they have been seriously hindered by the recent inclement weather and MIT's lack of indoor track facilities. Due to the cold, the Tech runners were able to work out only once on the boards in the week previous to the Millrose Games. This places them at a great disadvantage when competing against teams who are able to practice constantly on an indoor board track.

MIT begins its dual meet season tomorrow, meeting Northeastern University on Briggs Field at 1:15. The contest should prove to be very close due to the fact that Tech is powerful in the track events while it is correspondingly weak in the weights. Following the NU tilt, MIT has a track meet scheduled for every week until the week before the spring vacation. Their next home is against the University of New Hampshire on March 1.

Pistolmen Win Three
Drop Two, On Trip.
Newton High Scorer

Between semesters, the Beaver pistol team went South to shoot against some of the top squads in the nation. The trip was marked by victories over Villanova, U. S. Merchant Marine Academy, and the New York State Maritime College. Opening their tour at Annapolis, the Techmen ran into a red-hot team that set a range record while winning 1412-1325. The Midshipmen have been national champions for the past six years.

In Philadelphia on Tuesday, the visiting Engineers trounced Villanova, 1330-1269. Travelling north, they went to West Point, where they lost to the Cadets, who've been second to Navy nationally for the past six seasons.

USMMA and Maritime College proved to be soft touches for the Techmen, as they triumphed by tallies of 1333-1285 and 1316-1211, respectively.

Scoring for MIT on the trip were seniors Ed Newton, high man in New England, Mike West, Dick Nyder, and Bill Cooper, and sophs Mike Neidich, Mike Wolfson, Tom Remmers, and Jim Von Bencken.

Varsity Rifle Team
Cops Two Matches
On Southern Tour

Traveling through the Middle East during the Mid-term vacation, the MIT varsity rifle team won two of their five matches, as they faced the country's best teams. The Techmen opened their tour at Annapolis last Monday afternoon, as the Midshipmen eked out a 1425-1420 victory.

The folowing day, in Washington, the Beaver sharpshooters evened their record for the trip by defeating Georgetown 1408-1398. Next, the Engineers went to West Point, where they matched the previous day's total while the Cadets racked up 1445 to take the contest. Bouncing back, the MIT Nimrods downed the U. S. Merchant Marine Academy, and wound up the tour at St. John's where the home squad came out on top 1442-1419.

The ten riflemen making the trip for Tech were team captain Joe Jennings '59, Ron Pellar '59, Dwight Moody '59, Bob Voigt '59, Louis Nelson '59, Dave Hardiman '60, Marty Zimmerman '59, Al Ramsey '58, Dick Thorsell '60 and Van Eastlund '60.

MIT Fencers Trounce BU 18-9
Shabel And Foilers Pace Victory

Wednesday evening in Walker Memorial, the MIT varsity fencing team copped their third triumph of the season, defeating Boston University by a score of 18-9.

The Techmen were led to the victory by their outstanding foil team. The Beaver foilmen, undefeated in four intercollegiate meets, won eight out of nine bouts. Barrie Shabel '59 led the team with another 3-0 performance, winning his bouts by scores of 5-1, 5-3, and 5-2. Shabel, a fine prospect for this year's Eastern and National competition, has been defeated only once in twelve bouts this season. Mike Fein '58, and Sherman Karp '60, other varsity regulars in the weapon, both won two bouts without defeat. During the last round, sophs Fill McPherson and Jerry Yarbrough went in to gain experience. Yarbrough won his bout 5-3, while McPherson dropped the only foil bout, by a score of 5-2.

The Beaver epee team also turned in a fine performance, winning 7-2. Captain Les Dirks '58 won all three of his bouts. The scores were 5-2, 5-2 and 5-1. Joe Pedlosky '59 turned in a 2-0 performance, winning both bouts 5-3. Ron Wempen '59 was 2-1, winning 5-2 and 5-1, after losing his first bout 5-3. Chuck Haspel '60 lost his one bout 5-1. In sabre, BU showed its greatest strength, winning by a score of 6-3.

This victory gave the team a 3-1 record to date, only powerful Columbia having beaten them. The next home meet will be on Saturday afternoon, February 22, against Cornell.

WILLY LEY

(Continued from page 3)

tronomical calculations predicting its return.

After an unmanned moon rocket, we were sure to send up a manned orbital flight. According to the "Thousand-to-One" ratio already adduced, a four million-pound rocket would be needed to set the two-ton cabin in orbit. Such a cabin would be winged to allow a safe return to Earth.

All the technological hardware necessary for such a shot can now be had. Mr. Ley feels, though, that the one great unknown remaining is the reaction of the pilot to such a flight. It is known now that the human body can stand far more acceleration than is necessary to attain escape velocity. For instance, one testing subject went through the acceleration program of a three-stage rocket three times in succession without blacking out.

We know, too, that solar ultraviolet radiation can be filtered out very easily. It is also known that meteorites are so infrequent that one may be expected to hit a space ship no more often than once in fifteen or twenty thousand years.

A mysterious psychological reaction of outer space flight has been noted in jet pilots, which is called "separation". The man so afflicted feels that he is the only living being in existence—a sort of "apotheosis of space". This feeling is broken by contact with another person; therefore, space flights are sure to be manned by crews.

Willy Ley mentioned a device now being used to test psychological reactions. Called the "Space Cabin Simulator", it subjects its lone occupant to conditions which would be found on an outer space flight. Its occupant is due to leave the cabin this Sunday. Mr. Ley reported that the first two days of the test were very successful, with no troubles reported.

Mr. Ley repeated the schedule of our progress in space flight, which he has maintained for the past fifteen years. This year, we will send more satellites, moon rockets, and the Bell X15; in 1963, we will have a manned orbit, and by 1970 a manned expedition to the moon. He feels that the government is doing the best job it can do in the space-flight field, but that we certainly could have had a satellite up in 1955 and an unmanned moon rocket last year.

In other expressions of opinion, Mr. Ley expressed the need for a centralized space agency, to be run by the military for civilian purposes. He said that Russia is ahead of us simply because she had not waited to develop their missiles, as we had done. He also said that it was a poor idea to try to set up a satellite with a brand-new rocket, the Vanguard, when we had good systems already available, and he deplored the secrecy and security classifications in the rocket and space flight field, which greatly hamper our progress.